Conservation news

UK's first Hope Spot declared

The UK's first Hope Spot was declared around the Argyll Coast and Islands on World Ocean's Day, 8 June 2019 (Mission Blue, 2019, mission-blue.org/2019/06/first-ever-hope-spot-in-mainland-united-kingdom-declared-along-scotlands-argyll-coast-and-islands). This announcement, by Mission Blue, the international non-profit established by Sylvia Earle, celebrates the beauty, history and vibrant biodiversity of this part of Scotland's west coast, and recognizes the actions of local communities to protect it.

The Hope Spot covers c. 791 km^2 comprising an intricate coastline of sea lochs, peninsulas, deep water sounds (with depths up to 200 m), narrows and islands, encompassing or contiguous to 12 existing Marine Protected Areas and Special Areas for Conservation. The variation in geomorphology along this coast supports a wide range of species, from coastal specialists such as northern feather stars *Leptometra celtica* to deep water species such as the Critically Endangered flapper skate *Dipturus batis* (Neat et al., 2015, *Aquatic Conservation*, 25, 6–20). The area is renowned for supporting six species of cetaceans, including Risso's dolphins and humpback whales. This is one of the few remaining strongholds for the flapper skate in the UK. Management within the Loch Sunart to Sound of Jura Marine Protected Area protects the skate from boats using fishing methods that contact the seabed while trawling for prawns or dredging for scallops. Where these methods are allowed within some parts of the marine protected area they may cause harm to skate and other vulnerable marine species on the seabed, such as the northern sea fan *Swiftia pallida*.

Four community groups (the Community Association of Lochs and Sounds, Craignish Restoration of Marine and Coastal Habitats, Friends of the Sound of Jura and Save Seil Sound) have come together under the umbrella of the Coastal Communities Network (Coastal Communities Network, Scotland, 2019, communitiesforseas.scot) to highlight the need to protect the valuable and threatened waters of the Argyll Coast and Islands Hope Spot. These community groups aim to use this Hope Spot designation to demonstrate the vital connection between coastal communities and their local waters. Along with significant biodiversity, these waters also contain a number of sites of cultural importance, including shipwrecks spanning 400 years from the Spanish Armada to World War II.

The communities are calling for more effective management for marine protected areas within the Hope Spot, and enforcement of the law to prevent illegal dredging of closed areas. They also aim to ensure the surrounding communities can fully appreciate the significant natural and cultural heritage values of these waters, and can realize opportunities for economic enhancement associated with these under-recognized assets.

The Argyll Coast and Islands Hope Spot provides an opportunity to bring together local sea users to discuss issues affecting the marine wildlife and habitats of this area, and to engage the Scottish government on local priorities with regard to relevant policy and management decisions. Plans are underway to extend community-led surveys to better understand the biodiversity of these seas and provide a baseline for long-term monitoring.

Local community groups hope that the Hope Spot designation will provide opportunities to realize wider economic benefits whilst ensuring better management of these waters, and they will work across sectors to promote low impact, sustainable fisheries, and to promote high value income opportunities associated with ecotourism. They are already promoting widespread awareness of, and engagement with, the Hope Spot. Ultimately, their aim is for the Argyll Coast and Islands Hope Spot to restore the full value of these seas for both biodiversity and local people.

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Endangered crowned solitary eagle in the threatened Amazonian savannah

The crowned solitary eagle *Buteogallus coronatus* is one of the largest and most severely threatened eagles of the Neotropics, categorized as Endangered on the IUCN Red List because of its small and fragmented population (total number of reproductive individuals < 1000), significant range contraction and continuing decline (Canal et al., 2017, *Conservation Genetics*, 18, 235–240). The main threats to the species include habitat loss, human persecution and electrocution by power lines. Like other large eagles, the species has a naturally low population density, late sexual maturity and low productivity, characteristics that when combined with human-induced threats can drive species to extinction. The crowned solitary eagle inhabits open dry forest and savannahs across central Brazil, eastern Bolivia, Paraguay and northern Argentinian Patagonia (Bird Life International, 2016, datazone.birdlife.org).

Savannah enclaves on the periphery of the Amazon forest comprise heterogeneous mosaics of open areas and forests

with a diverse community of both savannah and forest adapted species. These enclaves are coveted by large-scale agriculture, particularly in the southern Brazilian Amazon, which has the highest deforestation rates in the country. During February 2017—February 2019 we conducted extensive surveys in this region, including in Campos Amazônicos National Park, which was created in 2006 to protect the largest Amazonian savannah enclave (434,200 ha) in the southern Brazilian Amazon. Within this enclave, during the dry season, we recorded a single adult crowned solitary eagle at 61.818 °W 8.478 °S, at least 600 km outside the species' known range. The record reported here is the most northerly known record of the species. Although unexpected because of the distance from documented populations, the area has large tracts of natural open habitats similar to those used by the crowned solitary eagle elsewhere.

Even though eagles have high dispersal capabilities, the great distance from other known populations suggests that this record is not a dispersing individual. However, further studies are needed to confirm whether there is a resident population within this savannah enclave. As documented for species elsewhere (Hody & Kays, 2018, *ZooKeys*, 759, 81–97), it is possible that the crowned solitary eagle is expanding its distribution northward, following substantial landscape transformation in this region from Amazonian forest to open areas for extensive cattle ranching. A number of recent records from extensive cattle-ranching areas (BirdLife International, 2016) suggests that the species is capable of tolerating disturbances associated with this anthropogenic habitat, although the species is persecuted by ranchers (Barbar et al., 2016, *Journal of Raptor Research*, 50, 115–121).

The existence of a resident population or pioneer colonists of the crowned solitary eagle would be good news both for the species and for Campos Amazônicos National Park, which faces severe challenges to the maintenance of its integrity, with various infrastructure projects planned or ongoing nearby, including roads, hydroelectric dams and mining. The presence of the crowned solitary eagle emphasizes the biodiversity value of this poorly studied region.

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The ecosystems of large unregulated rivers of Central Europe are under pressure

A social campaign has been organized in Poland against the international inland waterway E-40 (Ogólnopolskie Towarzystwo Ochrony Ptaków, 2019, otop.org.pl/naszeprojekty/pilnujemy/stop-dla-drogi-wodnej-e40), which will be constructed through Poland, Belarus and Ukraine, stimulated by a December 2018 report (Grygoruk et al., 2018, ratujmyrzeki.pl/dokumenty/E40_raport_2019.pdf). The construction of the waterway would connect the ports of Gdansk on the Baltic Sea in Poland and Kherson on the Black Sea in Ukraine, and would include parts of the Vistula, Bug, Pina, Prypec and Dnieper rivers. The plan for the E-40 waterway is a threat to the ecosystems of some of the largest and unregulated rivers of Poland and wider Europe. A development strategy for inland waterways was introduced in 2016 to adapt Poland's rivers to the criteria of international standards for inland waterways (Świerczewska-Pietras, 2018, *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 32, 38–53.). In addition, the act relating to Poland's ratification of the European Agreement on Main Inland Waterways of International Importance came into force in February 2017 (Lawicki et al., 2017, *Oryx*, 51, 397–397).

The construction of this Baltic–Black Sea waterway would affect many European rivers, especially in Poland, with the strongest impact on the Bug and Vistula. The plans include the construction of an artificial channel to connect the Bug and Vistula Rivers, which would be the main source of water for this channel. The construction of the channel would have an impact on important river valleys, including Tysmienica and Wilga, and the main impact would be the water required for operating the channel. This would particularly affect the Bug, which is unregulated along its entire length. The duration of river floods would be reduced by c. 20% and the frequency of severe droughts in the nearby area would increase (Grygoruk et al., 2018, op. cit.). The exploitation of the channel, and particularly the operation of its floodgates, would significantly reduce the levels of groundwater in most adjacent areas (Grygoruk et al., 2018, op. cit.). The fall in the water level of the Bug would diminish its ability to self-purify industrial and municipal sewage that comes from Ukraine (Starodubet et al., 2018, *Remote Sensing for Agriculture, Ecosystems, and Hydrology XX*, 107830P, published online 10 October 2018).

Almost all of the planned length of the E-40 in Poland passes through protected areas and it is estimated that the inland waterway would have an impact on 1,064 km² of these areas, including 12 Natura 2000 areas, one national park, four landscape parks and 23 nature reserves. Important animal species are also threatened: Eurasian oystercatcher *Haematopus ostralegus* (IUCN, NT), black-tailed godwit *Limosa limosa* (IUCN, NT), Eurasian otter *Lutra lutra* (IUCN, NT), common ringed plover *Charadrius hiaticula*